

202

11.5

HW

p 625 7, 10-12, 16-19

$$7. \quad p = \frac{60}{100} = .6$$

$$10. \quad A = \frac{72}{360} \pi 7.5^2 = 11.25\pi \approx 35.34 \text{ u}^2$$

$$p = \frac{72}{360} = .2$$

$$11. \quad A = \frac{120}{360} \pi 7.5^2 = 18.75\pi \approx 58.9 \text{ u}^2$$

$$p = \frac{120}{360} = .3$$

$$12. \quad A = \frac{135}{360} \pi 7.5^2 \approx 66.3 \text{ u}^2$$

$$p = \frac{135}{360} = .375$$

$$16. \quad r = 1 \text{ Whole picture} \quad 9\pi$$

$$r = 2 \text{ Shaded}$$

$$r = 3 \text{ Region} \quad 9\pi = 4\pi + 1\pi = 6\pi$$

$$p = \frac{6\pi}{9\pi} = \frac{2}{3}$$

$$17. \quad r = 6$$

$$A_{\text{sector}} = \frac{60}{360} 36\pi = 6\pi$$

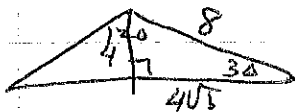
$$A = 6\pi - 9\sqrt{3} \approx 3.26 \text{ u}^2$$

$$A_{\Delta} = \frac{6^2 \sqrt{3}}{4} = 9\sqrt{3}$$

$$p = \frac{3.26}{36\pi} = .03$$

$$18. A_{\text{sector}} = \frac{120}{360} 64\pi \approx 67.0$$

$$A_{\Delta} =$$



$$\frac{1}{2} 8\sqrt{3} \cdot 4 = 16\sqrt{3}$$

$$A = 67.0 - 16\sqrt{3} = \boxed{39.3 \text{ u}^2}$$

$$P = \frac{39.3}{64\pi} = \boxed{.20}$$

$$19. A_{\text{sector}} = \frac{72}{360} \pi 7.5^2 = 11.25\pi$$

$$A_{\Delta} =$$



$$\cos 36 = \frac{a}{7.5}$$

$$6.07 = a$$

$$\sin 36 = \frac{x}{7.5}$$

$$x = 4.41$$

$$\frac{x}{2} = \frac{4.41}{2} = 2.205$$

$$A_{\Delta} = \frac{1}{2} 8.82 \cdot 6.07$$

$$A_{\Delta} = 26.8$$

$$A_{\text{segment}} = 11.25\pi - 26.8$$

$$8.5 \times 3 \approx \boxed{25.6 \text{ u}^2}$$

$$P = \frac{25.6}{7.5^2 \pi} = \boxed{.15}$$